

ENSP 2324 Scioli
Sustainability and environmental problems

Readings : Chapter 01 in textbook

Use these objectives in addition to the Review Questions on page 28-30 of your textbook.

01 Be able to define **exponential growth**. Be able to describe the connection between exponential growth and environmental problems.

02 Be able to distinguish between **solar capital** and **natural capital**. Be ready to evaluate the significance of these forms of capital in the development of human societies.

03 Be able to distinguish between **living on principal** and **living on interest**. Be prepared to analyze which of these behaviors humans are currently illustrating. Be ready to evaluate the possibility of continuing to live in our current style.

04 Be able to distinguish between **developed countries** (MDCs or more-developed countries) and **developing countries** (LDCs or less-developed countries). Be prepared to describe changes in the **wealth gap** between these groups of countries.

05 Be able to distinguish between (among) the following terms:
physically depleted versus **economically depleted resources**
nonrenewable versus **perpetually-renewable** versus **potentially-renewable resources**
reuse versus **recycling**

06 Be able to draw a **resource depletion curve**. Be prepared to explain how recycling and reuse affect depletion time.

07 Be able to define **sustainable yield**. Be prepared to describe the relationship between **sustainable use** and **environmental degradation**. Be prepared to describe the **tragedy of the commons**. Be ready to summarize how most environmentalists alleviate this type of tragedy.

If you have not yet thoroughly read Garrett Hardin's classic 1968 publication, *The Tragedy of the Commons*, download the PDF @

<http://www.sciencemag.org/site/feature/misc/webfeat/sotp/commons.xhtml>

08 Be able to distinguish between (among) the following terms:
point source of pollution versus **nonpoint source of pollution**
persistent versus **nonpersistent (degradable)** versus **nondegradable pollutants**.

09 Be able to distinguish between **pollution prevention** and **pollution cleanup**. Be prepared to evaluate the effectiveness of these two approaches in decreasing pollution.

10 Be prepared to summarize underlying causes of environmental problems. Be ready to describe a simple model of relationships among population, resource use, technology, environmental degradation, and pollution.